

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A radio base station comprising:
a monitor (34),
memory (33, 49) and
one or more resources (35 (i), 37 (j), 39 (k), 41 (m), 43 (n), 45 (o), 47 (p)), said memory (33, 49) being connected to the monitor (34) and arranged for storing tasks and data, each of said resources (35 (i), 37 (j), 39 (k), 41 (m), 43 (n), 45 (o), 47 (p)) being connected to the monitor (34) and arranged for at least one of performing a function and executing a program, ~~wherein the radio base station comprises~~
at least one analog ~~analog~~ signal manifold (39 (k)) comprising
input lines, output lines, and nodes for making connections between input and output lines, said input lines and output lines being connectable to predetermined resources and said nodes being arranged to perform at least a mathematic operation on an incoming signal on the input lines.
2. (Currently Amended) The radio ~~Radio~~ base station according to claim 1, wherein said resources (35 (i), 37 (j), 39 (k), 41 (m), 43 (n), 45 (o), 47 (p)) that are arranged to execute a program are also arranged to generate trigger signals and send them to the monitor (34), said monitor (34) being arranged to receive said trigger signals, to read one or more tasks related to said trigger signals from said memory (33, 49), to check whether resources required for performing said task are available and to send ~~sending~~ commands to selected resources specifying the task to be performed.
3. (Currently Amended) The radio ~~Radio~~ base station according to claim 1, wherein connections between said memory (33, 49) and said monitor (34), and

connections between said resources (35 (i), 37 (j), 39 (k), 41 (m), 43 (n), 45 (o), 47 (p)) and said monitor are implemented by means of a bus (54).

4. (Currently Amended) The radio Radio base station according to claim 3, wherein said resources (35 (i), 37 (j), 39 (k), 41 (m), 43 (n), 45 (o), 47 (p)) are arranged for mutual communication via said bus (54).

5. (Currently Amended) The radio Radio base station according to claim 3 ~~claims 3 or 4~~, wherein using the bus (54) is based on a datagram principle.

6. (Currently Amended) The radio Radio base station according to claim 1 ~~any of the preceding claims~~, wherein said memory (33, 49) comprises a task memory (33) and a data memory (49).

7. (Currently Amended) The radio Radio base station according to claim 1 ~~any of the preceding claims~~, wherein said monitor (34) comprises a state machine sequencer (79) for handling several state machines in parallel.

8. (Currently Amended) The radio Radio base station according to claim 7, wherein said memory comprises a ROM portion (64) and a RAM portion (59), said ROM portion (64) storing state machine definitions for said state machine sequencer (79), task definitions and default structures, said RAM portion (59) storing dynamic data.

9. (Currently Amended) The radio Radio base station according to claim 8, wherein said RAM portion (59) stores a resource allocation table (63), a data block list (65), and data blocks (67).

10. (Currently Amended) The radio Radio base station according to claim 1 ~~any of the claims 1-8~~, wherein said monitor (34) comprises an executor (77) arranged for:

sending commands to resources;
sending task block requests to memory (33,49) ;
receiving status information from resources; and
receiving task blocks from memory (33,49).

11. (Currently Amended) The radio ~~Radio~~ base station according to claim 9, wherein said monitor (31) comprises an executor (77) arranged for:

sending commands to resources;
sending task block requests to memory (33,49);
receiving status information from resources;
receiving task blocks from memory (33,49); and
maintaining said resource allocation table (63).

12. (Currently Amended) The radio ~~Radio~~ base station according to claim 1 ~~any of the preceding claims~~, wherein said one or more resources comprises at least one of:

a transmitter (35-(i)),
a receiver(37-(j)),
a digital analog ~~analogue~~ converter (41-(m)-),
an analog ~~analogue~~ digital converter (43-(n)-),
a control unit (45-(e)), and
a digital signal processor (47-(p)).

13. (Currently Amended) The radio ~~Radio~~ base station according to claim 12, wherein said one or more resources comprise at least one digital signal processor (47-(p)-) storing an executable image for performing a program.

14. (Currently Amended) The radio ~~Radio~~ base station according to claim 12 ~~any of the claims 12,13~~, wherein said one or more resources comprise

a plurality of transmitters (35-(i)-).
a plurality of receivers(37-(j)).

a plurality of digital analog ~~analogue~~ converters (41-(m)), and
a plurality of ~~analogue~~ analog digital converters (43-(n)). said at least one analog
~~analogue~~ signal manifold (39-(k)) being arranged for making connections between said
plurality of transmitters (35-(i)) and said plurality of digital analog ~~analogue~~ converters
(41-(m)), and for making connections between said plurality of receivers(37-(j)) and said
plurality of ~~analogue~~ analog digital converters (43-(n)).

15. (Currently Amended) The radio ~~Radio~~ base station according to
claim 1 ~~any of the preceding claims~~, wherein said mathematic operations comprise at
least one of multiplying, adding, subtracting, and one-to-one connecting.

16. (Currently Amended) A method ~~Method~~ of operating a radio base
station comprising a monitor (34), memory (33,49), one or more resources (35-(i),37-(j),
39-(k), 41-(m), 43-(n), 45(e), 47-(p)) and at least one ~~analogue~~ analog signal manifold
(39-(k)), said memory (33,49) being connected to the monitor(34) and storing tasks and
data, each of said one or more resources (35-(i), 37(j),39-(k),41-(m), 43-(n), 45-(e), 47-
(p)) being connected to the monitor (34), said at least one analog ~~analogue~~ signal
manifold (39-(k)) comprising input lines, output lines, and nodes for making connections
between input and output lines, said input lines and output lines being connectable to
predetermined resources, said method comprising:

at least one of performing a function and executing a program by said one or
more resources (35-(i),37-(j), 39-(k), 41-(m), 43-(n), 45(e), 47-(p)),

reading one or more tasks from said memory (33,49), checking whether
resources required for performing said one or more tasks are available and sending
commands to selected resources specifying the task to be performed;

connecting one or more input lines with one or more output lines of the analog
~~analogue~~-signal manifold (39-(k)) by means of said nodes; and

performing at least a mathematic operation on an incoming signal on the input
lines in said nodes.

17. (Currently Amended) A computer ~~Computer~~ program product within a computer usable medium storing instructions and data to be loaded by a radio base station comprising a monitor(31), memory(33, 49), one or more resources (35 (i), 37 (j), 39 (k), 41 (m), 43 (n), 45(e), 47 (p)) and at least one analog ~~analogue~~ signal manifold (39 (k)). said memory (33, 49) being connected to the monitor (31) and storing tasks and data, each of said one or more resources (35 (i), 37 (j), 39 (k), 41 (m), 43 (n), 45(e), 47 (p)) being connected to the monitor (31), said at least one analog ~~analogue~~ signal manifold(39 (k)) comprising input lines, output lines, and nodes for making connections between input and output lines, said input lines and output lines being connectable to predetermined resources, said computer program product, after being loaded, having instructions within the computer usable medium for allowing said monitor(31) to:

- read one or more tasks from said memory (33, 49),
- check whether resources required for performing said one or more tasks are available, and
- send commands to selected resources specifying the task to be performed, and
- send a command to said analogue signal manifold (39 (k)) to connect one or more input lines with one or more output lines and to perform at least a mathematic operation on an incoming signal on one or more input lines.

18. (Currently Amended) A data carrier comprising a computer program product according to claim 17 within a computer usable medium, storing instructions and data to be loaded by a radio base station comprising a monitor, memory, one or more resources and at least one analog signal manifold, said memory being connected to the monitor and storing tasks and data, each of said one or more resources being connected to the monitor, said at least one analog signal manifold comprising input lines, output lines, and nodes for making connections between input and output lines, said input lines and output lines being connectable to predetermined resources, said computer program product, after being loaded, having computer executable instructions for allowing said monitor to:

- read one or more tasks from said memory,

check whether resources required for performing said one or more tasks are available.

send commands to selected resources specifying the task to be performed, and
send a command to said analogue signal manifold to connect one or more input
lines with one or more output lines and to perform at least a mathematic operation on an
incoming signal on one or more input lines.